

APPARATUS AND METHOD FOR DIRECT MEASUREMENT OF ABSORPTION
AND SCATTERING COEFFICIENTS IN SITU

ABSTRACT OF THE DISCLOSURE

An apparatus for measuring an absorption coefficient includes a first diffusive material, a second diffusive material inside the first diffusive material separated from the first diffusive material by a cavity, and a transparent material proximate to an inner surface of the second diffusive material that holds an absorptive material. First and second light detectors measure light intensities in the first and second diffusive materials respectively. An absorption coefficient for the absorptive material may be determined based on the first and second light intensities measured when the cavity is illuminated by a light source.